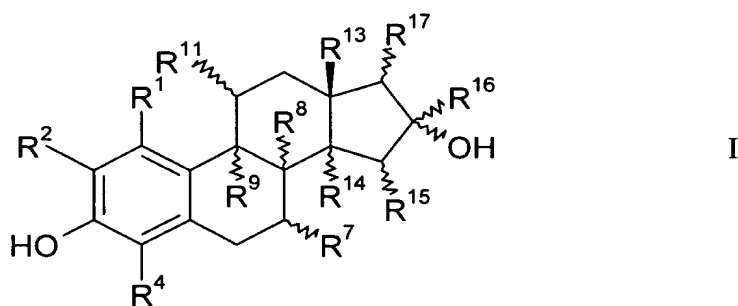


This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. – 52. (Canceled)

53. (Currently Amended) A 3,16-Dihydroxyestra-1,3,5(10)-triene compound of formula I:



in which radicals R^1 to R^{17} , independently of one another, have the following meanings:

- R^1 is a halogen atom, a hydroxyl group, a methyl group, a trifluoromethyl group, a methoxy group, an ethoxy group or a hydrogen atom;
- R^2 is a halogen atom, a hydroxyl group, a straight-chain or branched-chain, saturated or unsaturated alkoxy group with 1 to 6 carbon atoms or a hydrogen atom;
- R^4 is a halogen atom, a straight-chain or branched-chain, saturated or unsaturated alkyl group with 1 to 10 carbon atoms, a trifluoromethyl or pentafluoroethyl group, a straight-chain or branched-chain, saturated or unsaturated alkoxy group with 1 to 6 carbon atoms or a hydrogen atom;

- R⁷ is a halogen atom in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated alkoxy group with 1 to 6 carbon atoms, an optionally substituted aryl or heteroaryl radical or a hydrogen atom;
- R⁸ is a hydrogen atom in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position or a cyano group in α - or β -position;
- R⁹ is a hydrogen atom in α - or β -position, a methyl, ethyl, trifluoromethyl or pentafluoroethyl group in α - or β -position;
- R¹¹ is a nitrooxy group in α - or β -position, a hydroxyl or mercapto group in α - or β -position, a halogen atom in α - or β -position, a chloromethyl group in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated alkoxy or alkylthio group with 1 to 6 carbon atoms, an optionally substituted aryl or heteroaryl radical or a hydrogen atom;
- R¹³ is a methyl, ethyl, trifluoromethyl or pentafluoroethyl group in β -position;
- and either
- R¹⁴ is a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position or a hydrogen atom in α - or β -position
- and

R¹⁵ is a halogen atom in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position that can be interrupted by one or more oxygen atoms, sulfur atoms, sulfoxide or sulfone groups or imino groups = NR^{15'} wherein R^{15'} = hydrogen atom, methyl, ethyl, propyl, i-propyl; or a hydrogen atom

or

R¹⁴ and R¹⁵ together is a 14 α ,15 α -methylene or 14 β ,15 β -methylene group that are optionally substituted with one or two halogen atoms;

R¹⁶ is a straight-chain or branched-chain, saturated ~~or unsaturated~~, optionally partially or completely fluorinated, alkyl group with 1 to 10 carbon atoms in α - or β -position, a trifluoromethyl or pentafluoroethyl group, a cyanomethyl group or a hydrogen atom in α - or β -position;

R¹⁷ is a fluoro atom in α - or β -position, a straight-chain or branched-chain, saturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position or a hydrogen atom,

and

the wavy lines mean the arrangement of the respective substituent in α - or β -position,

excluding the compounds estra-1,3,5(10)-triene-3,16 α -diol, and estra-1,3,5(10)-triene-3,16 β -diol, ~~16 β -ethinylestra-1,3,5(10)-triene-3,16 α -diol and 16 α -ethinylestra-1,3,5(10)-triene-3,16 β -diol.~~

54. (Currently Amended) A compound according to claim 53, in which radicals R¹ to R¹⁷, independently of one another, have the following meanings

- R¹ is a fluorine atom, a hydroxyl group, a methyl group, a trifluoromethyl group, a methoxy group, an ethoxy group or a hydrogen atom;
- R² is a fluorine atom, a hydroxyl group, a methoxy or ethoxy group or a hydrogen atom;
- R⁴ is a fluorine atom, a methyl, ethyl, trifluoromethyl, methoxy or ethoxy group or a hydrogen atom;
- R⁷ is a fluorine atom in α - or β -position, a methyl, ethyl, propyl or i-propyl group in α - or β -position, an optionally substituted aryl radical, a trifluoromethyl group in α - or β -position or a hydrogen atom;
- R⁸ is a hydrogen atom in α - or β -position, a methyl or ethyl group in α - or β -position;
- R⁹ is a hydrogen atom in α - or β -position, a methyl, ethyl, trifluoromethyl or pentafluoroethyl group in α - or β -position;
- R¹¹ is a nitrooxy group in α - or β -position, a hydroxyl group in α - or β -position, a fluorine atom in α - or β -position, a choromethyl group in α - or β -position, a methyl group in α - or β -position, a methoxy group in α - or β -position, a phenyl- or 3-methylthien-2-yl radical in α - or β -position or a hydrogen atom;
- R¹³ is a methyl or ethyl group in β -position;
- and either
- R¹⁴ is a hydrogen atom in α - or β -position or a methyl group in α - or β -position
- and
- R¹⁵ is a fluorine atom in α - or β -position, a methyl group in α - or β -position, or a hydrogen atom,
- or

R¹⁴ and R¹⁵ together mean a 14 α ,15 α -methylene group or a 14 β ,15 β -methylene group,

R¹⁶ means a methyl, ethyl, ~~ethinyl, propinyl~~ or trifluoromethyl group;

R¹⁷ means a fluorine atom in α - or β -position, a methyl group, or a hydrogen atom.

55. (Previously presented) A compound of formula I according to claim 53, in which

R⁷ means a halogen atom in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated alkoxy group with 1 to 6 carbon atoms, or an optionally substituted aryl or heteroaryl radical

and

R¹, R², R⁴, R⁸, R⁹, R¹¹, R¹⁴, R¹⁵, R¹⁶ and R¹⁷ in each case are a hydrogen atom.

56. (Previously presented) A compound of formula I according to claim 53, in which

R¹¹ is a nitrooxy group in α - or β -position, a hydroxyl or mercapto group in α - or β -position, a halogen atom in α - or β -position, a chloromethyl group in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated alkoxy or alkylthio group with 1 to 6 carbon atoms, or an optionally substituted aryl or heteroaryl radical, and

R¹, R², R⁴, R⁷, R⁸, R⁹, R¹⁴, R¹⁵, R¹⁶ and R¹⁷ in each case are a hydrogen atom.

57. (Previously presented) A compound of formula I according to claim 53, in which

R^{15} is a halogen atom in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position that can be interrupted by one or more oxygen atoms, sulfur atoms, sulfoxide or sulfone groups or imino groups = $NR^{15'}$ ($R^{15'}$ = hydrogen atom, methyl, ethyl, propyl, i-propyl), and $R^1, R^2, R^4, R^7, R^8, R^9, R^{11}, R^{14}, R^{16}$ and R^{17} in each case are a hydrogen atom.

58. (Previously presented) A compound of formula I according to claim 53, in which

R^7 is a halogen atom in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated alkoxy group with 1 to 6 carbon atoms or an optionally substituted aryl or heteroaryl radical,

R^{11} is a nitrooxy group in α - or β -position, a hydroxyl or mercapto group in α - or β -position, a halogen atom in α - or β -position, a chloromethyl group in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated alkoxy or alkylthio group with 1 to 6 carbon atoms or an optionally substituted aryl or heteroaryl radical, and

$R^1, R^2, R^4, R^8, R^9, R^{14}, R^{15}, R^{16}$ and R^{17} in each case are a hydrogen atom.

59. (Previously presented) Compounds of general formula I according to claim 53, in which

R^7 is a halogen atom in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated alkoxy group with 1 to 6 carbon atoms or an optionally substituted aryl or heteroaryl radical,

R^{15} is a halogen atom in α - or β -position or a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position that can be interrupted by one or more oxygen atoms, sulfur atoms, sulfoxide or sulfone groups or imino groups = $NR^{15'}$ ($R^{15'}$ = hydrogen atom, methyl, ethyl, propyl, i-propyl), and

$R^1, R^2, R^4, R^8, R^9, R^{11}, R^{14}, R^{16}$ and R^{17} in each case are a hydrogen atom.

60. (Previously presented) A compound of formula I according to claim 53, in which

R^{11} is a nitrooxy group in α - or β -position, a hydroxy or mercapto group in α - or β -position, a halogen atom in α - or β -position, a chloromethyl group in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated alkoxy or alkylthio group with 1 to 6 carbon atoms or an optionally substituted aryl or heteroaryl radical,

R¹⁵ is a halogen atom in α - or β -position or a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position that can be interrupted by one or more oxygen atoms, sulfur atoms, sulfoxide or sulfone groups or imino groups = NR^{15'} (R^{15'} = hydrogen atom, methyl, ethyl, propyl, i-propyl), and

R¹, R², R⁴, R⁷, R⁸, R⁹, R¹⁴, R¹⁶, and R¹⁷ in each case are a hydrogen atom.

61. **(Previously presented)** A compound of formula I according to claim 53, in which

R⁷ is a halogen atom in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated alkoxy group with 1 to 6 carbon atoms or an optionally substituted aryl or heteroaryl radical,

R¹¹ is a nitrooxy group in α - or β -position, a hydroxyl or mercapto group in α - or β -position, a halogen atom in α - or β -position, a chloromethyl group in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl group with 1 to 10 carbon atoms in α - or β -position, a straight-chain or branched-chain, saturated or unsaturated alkoxy or alkylthio group with 1 to 6 carbon atoms or an optionally substituted aryl or heteroaryl radical,

R¹⁵ is a halogen atom in α - or β -position, or a straight-chain or branched-chain, saturated or unsaturated, optionally partially or completely fluorinated alkyl

group with 1 to 10 carbon atoms in α - or β -position that can be interrupted by one or more oxygen atoms, sulfur atoms, sulfoxide or sulfone groups or imino groups = NR^{15'} (R^{15'} = hydrogen atom, methyl, ethyl, propyl, i-propyl), and R¹, R², R⁴, R⁸, R⁹, R¹⁴, R¹⁶ and R¹⁷ in each case are a hydrogen atom.

62. (Previously presented) A compound according to claims 53, wherein one or both hydroxyl groups is (are) esterified at C atoms 3 and 16 with an aliphatic or aromatic carboxylic acid or with an α - or β -amino acid.

63. (Currently Amended) A compound according to claim 53, which compound is:

14 α ,15 α -methylen-estra-1,3,5(10)-triene-3,16 α -diol,
14 β ,15 β -methylen-estra-1,3,5(10)-triene-3,16 α -diol,
7 α -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
11 β -methoxy-estra-1,3,5(10)-triene-3,16 α -diol,
7 α -methyl-estra-1,3,5(10)-triene-3,16 α -diol,
11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
8 α -estra-1,3,5(10)-triene-3,16 α -diol,
estra-1,3,5(10)-triene-2,3,16 α -triol,
17 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
18 α -homo-estra-1,3,5(10)-triene-3,16 α -diol,
18 α -homo-14 α ,15 α -methylen-estra-1,3,5(10)-triene-3,16 α -diol,
14 α ,15 α -methylen-estra-1,3,5(10)-triene-3,16 β -diol,
14 β ,15 β -methylen-estra-1,3,5(10)-triene-3,16 β -diol,

7 α -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 11 β -methoxy-estra-1,3,5(10)-triene-3,16 β -diol,
 7 α -methyl-estra-1,3,5(10)-triene-3,16 β -diol,
 11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 8 α -estra-1,3,5(10)-triene-3,16 β -diol,
 estra-1,3,5(10)-triene-2,3,16 α -triol,
 17 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 18 α -homo-estra-1,3,5(10)-triene-3,16 β -diol,
 18 α -homo-14,15-methylen-estra-1,3,5(10)-triene-3,16 β -diol,
 7 α -ethyl-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -propyl-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -i-propyl-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -i-propenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -methoxy-estra-1,3,5(10)-triene-3,16 α -diol
 7 α -thiomethyl-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -cyanomethyl-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -ethyl-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -propyl-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -i-propyl-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -i-propenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -methoxy-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -thiomethyl-estra-1,3,5(10)-triene-3,16 α -diol,

7 β -cyanomethyl-estra-1,3,5(10)-triene-3,16 α -diol,
7 α -ethyl-estra-1,3,5(10)-triene-3,16 β -diol,
7 α -propyl-estra-1,3,5(10)-triene-3,16 β -diol,
7 α -i-propyl-estra-1,3,5(10)-triene-3,16 β -diol,
7 α -i-propenyl-estra-1,3,5(10)-triene-3,16 β -diol,
7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
7 α -methoxy-estra-1,3,5(10)-triene-3,16 β -diol,
7 α -thiomethyl-estra-1,3,5(10)-triene-3,16 β -diol,
7 α -cyanomethyl-estra-1,3,5(10)-triene-3,16 β -diol,
7 β -ethyl-estra-1,3,5(10)-triene-3,16 β -diol,
7 β -propyl-estra-1,3,5(10)-triene-3,16 β -diol,
7 β -i-propyl-estra-1,3,5(10)-triene-3,16 β -diol,
7 β -i-propenyl-estra-1,3,5(10)-triene-3,16 β -diol,
7 β -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
7 β -methoxy-estra-1,3,5(10)-triene-3,16 β -diol,
7 β -thiomethyl-estra-1,3,5(10)-triene-3,16 β -diol,
7 β -cyanomethyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 α -methyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 α -ethyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 α -propyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 α -allyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 α -i-propyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 α -i-propenyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 α -methoxy-estra-1,3,5(10)-triene-3,16 α -diol,

15 α -thiomethyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 α -methyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 α -ethyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 α -propyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 α -allyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 α -i-propyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 α -i-propenyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 α -methoxy-estra-1,3,5(10)-triene-3,16 β -diol,
15 α -thiomethyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 β -methyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 β -ethyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 β -propyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 β -allyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 β -i-propyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 β -i-propenyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 β -methoxy-estra-1,3,5(10)-triene-3,16 α -diol,
15 β -thiomethyl-estra-1,3,5(10)-triene-3,16 α -diol,
15 β -methyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 β -ethyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 β -propyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 β -allyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 β -i-propyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 β -i-propenyl-estra-1,3,5(10)-triene-3,16 β -diol,
15 β -methoxy-estra-1,3,5(10)-triene-3,16 β -diol,

15 β -thiomethyl-estra-1,3,5(10)-triene-3,16 β -diol,
 7 α -trifluoromethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -pentafluoroethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -ethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -i-propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -i-propenyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -phenyl-11 β -Fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -methoxy-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -thiomethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -cyanomethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -ethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -i-propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -i-propenyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -phenyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -methoxy-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -thiomethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 β -cyanomethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -ethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 α -propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 α -i-propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 α -i-propenyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 α -phenyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,

7 α -methoxy-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 α -thiomethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 α -cyanomethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 β -ethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 β -propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 β -i-propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 β -i-propenyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 β -phenyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 β -methoxy-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 β -thiomethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 7 β -cyanomethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -methyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -ethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -allyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -i-propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -i-propenyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -methoxy-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -thiomethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -methyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -ethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -allyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -i-propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,

15 α -i-propenyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -methoxy-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -thiomethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -methyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -ethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -allyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -i-propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -i-propenyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -methoxy-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -thiomethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -methyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -ethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -allyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -i-propyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -i-propenyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -methoxy-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -thiomethyl-11 β -fluoro-estra-1,3,5(10)-triene-3,16 β -diol,
 14 α ,15 α -methylene-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 14 β ,15 β -methylene-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 11 β -methoxy-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 7 α -phenyl-8 α -estra-1,3,5(10)-triene-3,16 α -diol,

7 α -phenyl-estra-1,3,5(10)-triene-2,3,16 α -triol,
 17 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 18 α -homo-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 18 α -homo-14 α ,15 α -methylene-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 14 α ,15 α -methylene-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 14 β ,15 β -methylene-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 11 β -methoxy-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 7 α -phenyl-8 α -estra-1,3,5(10)-triene-3,16 β -diol,
 7 α -phenyl-estra-1,3,5(10)-triene-2,3,16 α -triol,
 17 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 18 α -homo-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 18 α -homo-14 α ,15 α -methylene-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -methyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -ethyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -propyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -allyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -i-propyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -i-propenyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -methoxy-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -thiomethyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -methyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -ethyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -propyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,

15 α -allyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -i-propyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -i-propenyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -methoxy-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -thiomethyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -methyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -ethyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -propyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -allyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -i-propyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -i-propenyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -methoxy-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -thiomethyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -methyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -ethyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -propyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -allyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -i-propyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -i-propenyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -methoxy-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -thiomethyl-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -methyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -ethyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -propyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,

15 α -allyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -i-propyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -i-propenyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -methoxy-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -thiomethyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 α -methyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -ethyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -propyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -allyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -i-propyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -i-propenyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -methoxy-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 α -thiomethyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -methyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -ethyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -propyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -allyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -i-propyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -i-propenyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -methoxy-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -thiomethyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 α -diol,
 15 β -methyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -ethyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -propyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,

15 β -allyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -i-propyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -i-propenyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -methoxy-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 15 β -thiomethyl-11 β -fluoro-7 α -phenyl-estra-1,3,5(10)-triene-3,16 β -diol,
 11 β -[2-(3-methylthien)-yl]-estra-1,3,5(10)-triene-3,16 α -diol,
 11 β -[2-(3-methylthien)-yl]-estra-1,3,5(10)-triene-3,16 β -diol,
~~13 α -estra-1,3,5(10)-triene-3,16 α -diol,~~
~~13 α -estra-1,3,5(10)-triene-3,16 β -diol,~~
~~14 β -estra-1,3,5(10)-triene-3,16 α -diol,~~
~~14 β -estra-1,3,5(10)-triene-3,16 β -diol,~~
 11 β -methylestra-1,3,5(10)-triene-3,16 α -diol,
 11 β -methylestra-1,3,5(10)-triene-3,16 β -diol,
 11 β -methyl-18a-homoestra-1,3,5(10)-triene-3,16 α -diol,
 11 β -methyl-18a-homoestra-1,3,5(10)-triene-3,16 β -diol,
 11 β -ethylestra-1,3,5(10)-triene-3,16 α -diol,
 11 β -ethylestra-1,3,5(10)-triene-3,16 β -diol,
 11 β -ethyl-18a-homoestra-1,3,5(10)-triene-3,16 α -diol,
 11 β -ethyl-18a-homoestra-1,3,5(10)-triene-3,16 β -diol,
~~11 β -vinylestra-1,3,5(10)-triene-3,16 α -diol,~~
~~11 β -vinylestra-1,3,5(10)-triene-3,16 β -diol,~~
~~11 β -vinyl-18a-homoestra-1,3,5(10)-triene-3,16 α -diol,~~
~~11 β -vinyl-18a-homoestra-1,3,5(10)-triene-3,16 β -diol,~~
~~11 β -ethinylestra-1,3,5(10)-triene-3,16 α -diol,~~

~~11 β -ethinylestra-1,3,5(10)-triene-3,16 β -diol,~~
~~11 β -ethinyl-18a-homoestra-1,3,5(10)-triene-3,16 α -diol,~~
~~11 β -ethinyl-18a-homoestra-1,3,5(10)-triene-3,16 β -diol,~~
 9 α -methylestra-1,3,5(10)-triene-3,16 α -diol, or
~~9 α -methylestra-1,3,5(10)-triene-3,16 β -diol,~~
 9 α -methyl-18a-homoestra-1,3,5(10)-triene-3,16 α -diol,
~~9 α -methyl-18a-homoestra-1,3,5(10)-triene-3,16 β -diol,~~
~~7 α -methyl-18a-homoestra-1,3,5(10)-triene-3,16 α -diol,~~
~~7 α -methyl-18a-homoestra-1,3,5(10)-triene-3,16 β -diol,~~
~~7 α -ethyl-18a-homoestra-1,3,5(10)-triene-3,16 α -diol,~~
~~7 α -ethyl-18a-homoestra-1,3,5(10)-triene-3,16 β -diol,~~
~~7 α ,11 β -dimethylestra-1,3,5(10)-triene-3,16 α -diol,~~
~~7 α ,11 β -dimethylestra-1,3,5(10)-triene-3,16 β -diol,~~
~~7 α ,11 β -dimethyl-18a-homoestra-1,3,5(10)-triene-3,16 α -diol, or~~
~~7 α ,11 β -dimethyl-18a-homoestra-1,3,5(10)-triene-3,16 α -diol,~~
~~16 β -ethinyl-18a-homoestra-1,3,5(10)-triene-3,16 α -diol,~~
~~16 α -ethinyl-18a-homoestra-1,3,5(10)-triene-3,16 β -diol,~~
~~7 α -methyl-16 β -ethinylestra-1,3,5(10)-triene-3,16 α -diol,~~
~~7 α -methyl-16 α -ethinylestra-1,3,5(10)-triene-3,16 β -diol,~~
~~7 α -methyl-16 β -ethinyl-18a-homoestra-1,3,5(10)-triene-3,16 α -diol,~~
~~7 α -methyl-16 α -ethinyl-18a-homoestra-1,3,5(10)-triene-3,16 β -diol,~~
~~11 β -methyl-16 β -ethinylestra-1,3,5(10)-triene-3,16 α -diol,~~
~~11 β -methyl-16 α -ethinylestra-1,3,5(10)-triene-3,16 β -diol,~~

~~11 β -methyl-16 β -ethinyl-18 α -homoestra-1,3,5(10)-triene-3,16 α -diol, or~~

~~11 β -methyl-16 α -ethinyl-18 α -homoestra-1,3,5(10)-triene-3,16 β -diol.~~

64. (Previously presented) A compound according to claim 63, which compound is:

7 α -fluoro-estra-1,3,5(10)-triene-3,16 α -diol,

7 α -methyl-estra-1,3,5(10)-triene-3,16 α -diol,

7 α -methyl-estra-1,3,5(10)-triene-3,16 β -diol, or

18 α -homo-estra-1,3,5(10)-triene-3,16 α -diol.

65. (Previously presented) A pharmaceutical composition containing at least one compound according to claim 53 and a pharmaceutically compatible vehicle.